REMARKS

Applicants have added claims 25-29 for the purpose of provoking an interference with U.S. Patent No. 6,293,039 B1 to Fuchs, assigned to SIG Arms International AG ("the '039 patent"), a copy of which is attached as Appendix A. Claims 25-29 have been copied from claims 1-5 of the '039 patent.

As Applicants will demonstrate, claims 25-29 define allowable subject matter that interferes with the inventions claimed in the '039 patent. Indeed, as Applicants will demonstrate, the '039 patent was derived from disclosures Applicants made to the named inventor on the '039 patent well before the German counterpart application was filed. Indeed, the embodiment disclosed in the '039 patent is virtually a carbon copy of an embodiment that the Applicants reduced to practice and demonstrated to Mr. Fuchs.

Thus, Applicants request that an interference be declared between the present application and the '039 patent. Because an interference with an issued patent is requested, Applicants respectfully request that examination of the present application be expedited.

In canceling claims 1-24, Applicants have obviated the grounds for rejection of these claims, all which were based on the '039 patent. Applicants are not abandoning the subject matter of these claims. Rather, the embodiments being claimed have been amended to invite a prompt declaration of the requested interference. Applicants reserve the right to prosecute the cancelled subject matter in a continuing application.

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I. The Specification Fully Supports Applicants' Claims 25-29

As shown below, the present application supports new claims 25-29. Thus,

Applicants' claims 25-29 are entitled to an effective filing date corresponding to

Applicants' domestic filing date, i.e., March 15, 1999.

U.S. Patent 6,293,039 B1: claim 1, Appl. No. 09/270,461: claim 25	Representative Disclosures from Appl. No. 09/270,461
A pistol having a locking mechanism configured to lock a trigger mechanism of the pistol if an attempt is made by an unauthorized person to fire the pistol, the locking mechanism comprising:	"[T]he electromechanical locking mechanism of the present invention can be used to effectively render a firearm inoperable, whether loaded or unloaded, whether cocked or uncocked, while restricting the use of that firearm to only authorized users." (Page 16)
an identification unit configured to detect an identification signal inputted into the identification unit;	"Referring to Fig. 1, there is shown a firearm having a keypad unit 22 well known in the art, by which the user would enter a personal identification code just as the user would for an ATM machine or for a common electronic lock." (Page 10)
a control unit connected to the identification unit, the control unit configured to compare the signal inputted into the identification unit with a stored identification code;	selection buttons for enabling selection of a series of numbers in sequence; and at least one microprocessor responsive to correct selection of said selection buttons to electrically connect said power supply means to said blocking means." (Pages 18-19)

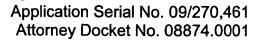
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7	an actuator device including a geared motor connected to the control unit and connected by a threaded spindle and nut connection with a mechanical locking element which is movable between a locked position and an unlocked position, wherein in the locked position the locking element locks a trigger tongue of the pistol;	"[T]he keypad unit 22 (see Fig 2) is also electrically connected by a wire or flex cable 36b (see Fig 4) to a motor 40 (see Fig 2) joined to a gear train 42 (see Fig 2). An output shaft 44 (see Fig 4) is connected to a threaded shaft coupler 46 (see Fig 4), the threaded end of [which] is threaded into a complementary sized threaded channel (not shown) in traveling box 48. Emerging from said traveling box 48 is a pin 54 (see Fig 4) extending into one of two notches of apertures 56a and 56b (see Fig 5) in a pivoted trigger 58 (Fig 5)." (Pages 11-12)
	a battery for supplying electrical power to the locking mechanism; and	"In accordance with the present invention, an electromechanical device for limiting use of a firearm to only authorized users comprises a power control means, such as a keypad unit for example, that can be accessed only by users possessing the correct code, which, following successful access, allows current from a power source, such as a battery for example, to energize and drive a motor in conjunction with an integrated gear train." (Page 6)
	a plurality of display elements configured to display an operating status of the locking mechanism.	"The keypad unit 22 has a battery indicator 26 (see Fig 2), which when illuminated shows that a battery 34 (see Fig 2) is charged, a fire or danger indicator 28 (see Fig 2), which when illuminated, shows the firearm 20 (see Fig. 1) to be in an unlocked mode, and a safe indicator 30 (see Fig. 2), which when illuminated, shows the firearm 20 (see Fig. 1) to be in a locked mode." (Page 11)

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U.S. Patent 6,293,039 B1: claim 2
Appl. No. 09/270,461: claim 26
Appl. No. 09/270,461: claim 26

Representative Disclosures from Appl. No. 09/270,461

A pistol as claimed in claim 1, wherein the locking mechanism is configured to engage a notch in the trigger tongue, and wherein the locking element is guided for movement in a bolt and is springloaded.

"In the locking action, pin 54 (see Fig 4) is pushed forward by the energy of the spring emerging partially out of the end of the traveling block 48 (see Fig 4) and seats itself into the notch of aperture 54a or 54b (see Fig 5) in the rotatable trigger 58 (see Fig 5), as appropriate, depending upon whether the firearm (see Fig 1) is in the cocked or uncocked mode." (Page 12)

U.S. Patent 6,293,039 B1: claim 3
Appl. No. 09/270,461: clạiṃ 27
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Representative Disclosures from Appl. No. 09/270,461

A pistol as claimed in claim 1, wherein at least the greater portion of the locking mechanism is located in front of a trigger guard and below the barrel of the gun.

See Figs. 1 and 2.

U.S. Patent 6,293,039 B1: claim 4 Appl. No. 09/270,461: claim 28

Representative Disclosures from Appl. No. 09/270,461

The pistol as claimed in claim 1, wherein the identification unit comprises a keypad for the input of the code.

"In accordance with the present invention, an electromechanical device for limiting use of a firearm to only authorized users comprises a power control means, such as a keypad unit for example, that can be accessed only by users possessing the correct code, which, following successful access, allows current from a power source, such as a battery for example, to energize and drive a motor in conjunction with an integrated gear train." (Page 6)

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U.S. Patent 6,293,039 B1: claim 5	Representative Disclosures
Appl. No. 09/270,461: claim 29	from Appl. No. 09/270,461
The pistol as claimed in claim 1, wherein the identification unit comprises a finger-print scanner.	"[T]he keypad could be replaced by a biometric identity device such as a fingerprint reader." (Page 17)

II. An Interference Between the Present Application and the '039 Patent Is Appropriate

An interference is appropriate between an application and an unexpired patent of different parties when the application and the patent contain claims to the same patentable invention. See § 2306 of the M.P.E.P., which provides, in pertinent part:

An interference may be declared between an application and a patent if the application and the patent are claiming the same patentable invention, as defined in 37 C.F.R. § 1.601(n).....¹

Since Applicants' claims 25-29 are identical to claims 1-5 of the '039 patent, Applicants are claiming "the same patentable invention."

III. Applicants' Claims 25-29 Are Patentable

Applicants' claims 25-29 are identical to claims 1-5 of the '039 patent.

Specifically, Applicants' independent claim 25 is substantially identical to independent claim 1 of the '039 patent. Because claims 1-5 of the '039 patent define a patentable invention, corresponding pending claim 25 must be patentable for the same reasons. It

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Similarly, 37 C.F.R. § 1.601(j) notes that "[a]n interference-in-fact exists when at least one claim of a party ... and at least one claim of an opponent ... define the same patentable invention."

follows that if independent claim 25 defines patentable subject matter, then claims 26-29, which are dependent upon claim 25, also must define patentable subject matter.

IV. Proposed Count

Applicants propose claim 1 of the '039 patent, the only independent claim in the patent, as the count. For the Examiner's convenience, Applicants have attached a courtesy copy of the "Interference-Initial Memorandum" form PTO-850 as Appendix B, and a copy of the proposed count is attached as Appendix C.

V. Count/Claim Correspondence

All the pending claims and all the claims in the '039 patent should be designated as corresponding to the count, since all of these claims are dependent upon claim 1. There is no indication that any of the claims in the '039 patent define a separately patentable invention, and it is a fundamental tenet of interference law that "All claims in the application and patent which define the same patentable invention as a count shall be designated to correspond to the count." 37 C.F.R. § 1.606.

VI. Relevant Dates

The Applicants filed the instant application, Application Serial No. 09/270,461, on March 15, 1999.

The '039 patent matured from Application Serial No. 09/246,050, filed February 8, 1999. The '039 patent claims priority to a German application filed February 10, 1998.

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Based on these relative dates, the effective filing date of the '039 patent predated Applicants' effective filing date. Consequently, Applicants should be designated as the junior party for the proposed count.

VII. Applicants' Statement Under 37 C.F.R. §1.608

As shown above, the filing date of the present application is March 15, 1999, which is approximately a month after the U.S. filing date of the '039 patent, i.e., February 8, 1999. Applicants allege that there is a basis upon which the Applicants are entitled to judgment relative to the patentees of the '039 patent. Accordingly, Applicants satisfy the requirements of Rule 608(a).²

Even though a showing under Rule 608(b) is not necessary, to demonstrate the extraordinary circumstances that have led to this request for an interference, Applicants are submitting herewith affidavits to demonstrate that Applicants reduced their invention to practice and disclosed their invention to the inventor of the '039 patent well before the application for that patent was filed. In other words, this is a clear and unmistakable case of derivation that merits the declaration of an interference.

Three affidavits are submitted with these remarks: (i) affidavit of Tony A.

Hancock and Jonathan Doran Buckley, the named inventors, a copy of which is attached as Appendix D; (ii) affidavit of Sean Garnett, who built the electronics board for a prototype of the claimed invention, a copy of which is attached as Appendix D,

² "When the effective filing date of an application is three months or less after the effective filing date of a patent, before an interference will be declared, . . . the applicant . . . shall file a statement alleging that there is a basis upon which the applicant is entitled to a judgement relative to the patentee." 37 C.F.R. §1.608(a).

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(Exh. 18); and (iii) affidavit of Austin D. Pyle, who built the electromechanical safety/locking system for a prototype of the claimed invention, a copy of which is attached as Appendix D (Exh. 19).

The affidavit of Messrs. Hancock and Buckley states, inter alia, that they entered into a development agreement with SIG, the assignee of the '039 patent, in February 1997 to develop an electronic identification and security system for handguns. On June 18, 1997, the inventors sent SIG (and specifically Rudolf Fuchs, the named inventor of the '039 patent) a line drawing of a trigger block design with a spring-loaded pin, which bears a remarkable similarity to Fig. 1 of the '039 patent. On June 23, 1997, the inventors sent 3-dimensional solid model computer drawings to SIG (and specifically to Rudolf Fuchs).

The affidavit of Messrs. Hancock and Buckley further states, inter alia, that they constructed a functional prototype of the invention claimed in the pending application in June-August of 1997. At the inventors' direction, Specialty Machinery built the spring-loaded pin assembly, and Shadowsand Inc. built the electronics board. A videotape was made of the first prototype in operation and provided to SIG (specifically Rudolf Fuchs) in July 1997 (a copy of that videotape is included with the affidavit). In August, a functional prototype with an external electronics board was completed. Color photos of the prototype were sent to SIG in Germany (specifically to Rudolf Fuchs) on August 6, 1997. The prototype was demonstrated to SIG Arms USA on August 8, 1997, and the prototype was demonstrated to SIG in Germany (specifically to Rudolf Fuchs) on August 21, 1997.

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The affidavit of Messrs. Hancock and Buckley goes on to state, inter alia, that they completed a marketing prototype, with a miniaturized circuit board and a keypad, in December 1997. That prototype was later used as the basis for drafting the pending application, and that is the prototype that has been tested by the Kentucky State Police and was demonstrated to the examiner in the interview several months ago. More importantly for purposes of the outstanding rejection, this prototype represents a reduction to practice of the pending claims.

In December 1997, before the marketing prototype was completed, SIG informed the named inventors that it did not wish to continue the development contract with the named inventors because "our marketing people are not sure if we should introduce a PIN-code-based solution to the market." See Exh. 16. Later SIG returned all the materials that the named inventors had shipped to them (see Exh. 20), thus corroborating the fact SIG had received all of these materials. Less than three months later, SIG filed a patent application in Germany (the priority application cited in the '039 patent), copying the very design the inventors of the pending application had disclosed to SIG (and specifically to Mr. Fuchs).

The affidavit of Sean Garrett corroborates the affidavit of the inventors.

Mr. Garnett confirms that a functional prototype was constructed in June 1997, that an electronics board was constructed in July and August of 1997, and that the marketing prototype was completed in December 1997. Most importantly, Mr. Garnett states that the marketing prototype (a SIG 239 handgun with the trigger built up and drilled, the frame modified, the motor, the gear, and spring-loaded-pin in position, and the

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protective box machined and attached) was delivered to him in mid-December 1997.

Mr. Garnett then embedded the electronics, attached the keypad, and "completed assembling the marketing prototype" in late December 1997.

The affidavit of Austin D. Pyle further corroborates the affidavit of the inventors. Mr. Pyle confirms that he built the "trigger block" safety/locking system for the functional prototype in June 1997 and was present when the prototype was test fired and videotaped. He also states that he incorporated the trigger block safety/locking system in the marketing prototype in the fall of 1997. Most importantly, Mr. Pyle states that the marketing prototype "was complete and functioning with no problems in late December 1997 and early January 1998."

In view of the foregoing, it is clear that the named inventors had reduced the invention of the pending application to practice by late December 1997, more than a year before the application for the '039 patent was filed in the United States. Moreover, it is clear that the inventors of the pending application disclosed the invention of the pending application to the inventor of the '039 patent, Mr. Fuchs, prior to the filing of the application of the '039 patent. Thus, the '039 patent is not an effective reference under 35 U.S.C. § 102(e) or §§ 102(e)/103. The '039 patent is, in reality, Applicants' own invention, wrongfully copied by SIG and Mr. Fuchs, and now standing as an obstacle to a patent sought by the true inventors. A stronger case for declaring an interference could hardly be imagined.

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VIII. The Requirements of 35 U.S.C. §1.135(b) Are Satisfied

The '039 patent issued on September 25, 2001. Claims 1-5 and 7 of the pending application, which were filed on March 15, 1999, define substantially the same subject matter as claims 1-5 of the '039 patent. Although claims 1-5 and 7 have since been cancelled, it is settled that cancelled claims can establish compliance with 35 U.S.C. § 1.135(b) because the PTO "should declare an interference whenever copending applications claim substantially the same invention, and, if it fails to do so, the public interest is better served by a belated interference than by the issuance of a second patent." Corbett v. Chisholm, 196 USPQ 337, 342 (CCPA 1977).

U.S. Patent 6,293,039 B1: claim 1 Appl. No. 09/270,461: claim 25	Application No. 09/270,461: claims 1-5, 7
A pistol having a locking mechanism configured to lock a trigger mechanism of the pistol if an attempt is made by an unauthorized person to fire the pistol, the locking mechanism comprising:	"a firearm; and an electromechanical locking apparatus for preventing the unauthorized use of the firearm" (see claim 1)
an identification unit configured to detect an identification signal inputted into the identification unit;	"said keyboard assembly includes: selection buttons for enabling selection of a series of numbers in sequence" (see claim 3)
a control unit connected to the identification unit, the control unit configured to compare the signal inputted into the identification unit with a stored identification code;	"said keyboard assembly includes: * * * and at least one microprocessor responsive to correct selection of said selection buttons to electrically connect said power supply means to said blocking means" (see claim 3)

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an actuator device including a geared "The combination according to claim 1 in which motor connected to the control unit said power control means includes means for and connected by a threaded spindle operatively connecting said power supply and nut connection with a mechanical means to said blocking means to prevent locking element which is movable operation of the firearm." (see claim 2) between a locked position and an unlocked position, wherein in the locked position the locking element "said blocking means includes: locks a trigger tongue of the pistol; a motor for activation by said power supply means: a gear train driven by said motor when said motor is activated from said power supply means: and axial moving means connected to said gear train, said axial moving means includes means for preventing rotation of said trigger of said firearm." (see claim 4) The combination according to claim 5 in which said gear train has a threaded output shaft of a sufficient length to axially move said pin." (see claim 7) a battery for supplying electrical "said electromechanical locking apparatus power to the locking mechanism; and includina power supply means for supplying power" (see claim 1) The structure disclosed in the application that corresponds to the "power supply means" is a battery. (see, e.g., claim 14)

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a plurality of display elements configured to display an operating status of the locking mechanism.	

U.S. Patent 6,293,039 B1: claim 2 Appl. No. 09/270,461: claim 26

Application No. 09/270,461: claims 1-5, 7

A pistol as claimed in claim 1, wherein the locking mechanism is configured to engage a notch in the trigger tongue, and wherein the locking element is guided for movement in a bolt and is springloaded.

"The combination according to claim 4 in which:

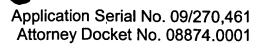
said trigger of said firearm has at least one aperture

and said preventing means of said axial moving means includes a

pin for disposition in said aperture in said trigger of said firearm when said axial moving means is activated to prevent rotation of said trigger of said firearm." (see claim 5)

In addition, as disclosed in the specification, the structure corresponding to the "axial moving means" for moving the pin (bolt) includes a spring: "In the locking action, pin 54 (see Fig 4) is pushed forward by the energy of a spring emerging partially out of the end of the traveling block 48 (see Fig 4) and seats itself into the notch of aperture 54a or 54b (see Fig 5) in the rotatable trigger 58 (see Fig 5Z), as appropriate, depending on whether the firearm 20 (see Fig 1) is in the cocked or uncocked mode." (Page 14)

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U.S. Patent 6,293,039 B1: claim 3 Appl. No. 09/270,461: claim 27	Application No. 09/270,461: claims 1-5, 7
A pistol as claimed in claim 1, wherein at least the greater portion of the locking mechanism is located	"said electromechanical locking apparatus including:
of the locking mechanism is located in front of a trigger guard and below the barrel of the gun.	blocking means for blocking normal operation of said firearm;
	power supply means for supplying power;
	and power control means for controlling the supply of power to said blocking means from said power supply means to enable activation of said blocking means to prevent operation of said firearm." (see claim 3)
	Together, the blocking means, the power supply means, and the power control means make up the "locking mechanism." The greater portion of the structure corresponding to these means disclosed in the specification is located in front of the trigger guard and below the barrel of the gun. See Figs. 1 and 2.
U.S. Patent 6,293,039 B1: claim 4 Appl. No. 09/270,461: claim 28	Application No. 09/270,461: claims 1-5, 7
The pistol as claimed in claim 1, wherein the identification unit	"The combination according to claim 2 in which:
comprises a keypad for the input of the code.	said operatively connecting means of said power
•	control means includes a keypad assembly"

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U.S. Patent 6,293,039 B1: claim 5 Appl. No. 09/270,461: claim 29	Application No. 09/270,461: claims 1-5, 7
The pistol as claimed in claim 1, wherein the identification unit comprises a finger-print scanner.	"The combination of claim 1 in which said power control means includes means for operatively connecting said power supply means to said blocking means to prevent operation of said firearm." (see claim 2) The "operatively connecting means" includes a "keypad assembly" (see claim 3), and the corresponding structure disclosed in the
	specification includes "a biometric device such as a fingerprint reader" (see page 17).

The only claim element in claims 1-5 of the '039 patent that is not recited in original claims 1-5 and 7 of the pending application is the following:

a plurality of display elements configured to display an operating status of the locking mechanism.

This claim limitation, however, is an obvious addition to the other claim elements. Indeed, prior art cited by the examiner against the pending application includes such display elements. See, e.g., U.S. Patent 5,704,151, a copy of which is attached as Appendix E (col. 5, lines 51-54: "In the most preferred embodiment, frontplate 4 also comprises at least one light-emitting diode 6, which can act as an indicator of such situations such as low battery power, improper code entry, authorized code entry, or

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tampering.")³ Thus, under 37 C.F.R. § 601(n), original claims 1-5 and 7 of the pending application claim the "same patentable invention" as claims 1-5 of the '039 patent. It follows that original claims 1-5 and 7 of the pending application claim "substantially the same subject matter" as claim 1-5 of the '039 patent as required by U.S.C. § 1.135(b).

Because Applicants have presented these claims within one year of the September 25, 2001 issuance of the '039 patent, Applicants have complied with the requirements of 35 U.S.C. §1.135(b).⁴

IX. Conclusion

Applicants have demonstrated that claims 25-29 of the present application define allowable subject matter that interferes with the claims of the '039 patent, and thus satisfy the requirements of Rule 607. Consequently, an interference based on the proposed count is appropriate. Accordingly, Applicants respectfully request that the Examiner:

- (1) Prepare and transmit Form PTO-850 recommending that the Board of Patent Appeals and Interferences institute an interference between the present application and the '039 patent.
 - (2) Propose the count as set forth in this Request.

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³ See also U.S. Patent 5,448,847, a copy of which is attached as Appendix F (col. 4, lines 34-40: "Fitted within grip 12 are leds 16-18 which are connected to a flexible membrane circuit (shown in FIGS. 2 and 3). The flexible membrane circuit is fitted within a recess of grip. Led 18 is preferably the color "green" to indicate that weapon 60 is in a safe or lock on condition, while led 16 is preferably the color "red" to indicate that weapon 60 is in a [sic] "off" or firing position.").

⁴ "A claim which is the same as, or for the same or substantially the same subject matter as, as claim of an issued patent may not be made in any application unless such a claim is made prior to one year from the date on which the patent was granted." 35 U.S.C. §1.135(b).

(3) Designate Applicants' claims 25-29 and all the claims of the '039 patent correspond to the count.

Further, upon a determination by the Examiner that an interference should be declared, Applicants respectfully request that the Examiner issue a Notice suspending prosecution of the instant application pending declaration of an interference.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.

Dated: October 9, 2003

Thomas H. Jenkins Reg. No. 30,857

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